

### **REMARKS**

Claims 24-53 are pending in the application. Claims 24-27, 30, 31, 38, 39, and 44-52 were previously withdrawn. Claims 24-32, 35-40, and 53 have been canceled without prejudice. Claims 33, 42, 44 and 48 have been amended and new claims 54-58 have been added. Support for the new claims and claim amendments may be found throughout the specification, including the claims as originally filed. No new matter has been added. No new issues have been raised.

Amendments of the claims should in no way be construed as an acquiescence to any of the Examiner's rejections. The amendments to the claims are being made solely to expedite prosecution of the present application. Applicants reserve the right to further prosecute claims drawn to all subject matter disclosed in the instant patent application or in a continuation hereof.

Applicants respectfully request that previously withdrawn claims 44-52 be rejoined as they are drawn to methods of preparing flour dough using the composition of claim 33 and its dependent claims thereof. As stated in the MPEP 821.04, "if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim will be rejoined."

The Examiner's remarks in the last Office Action are addressed below. It is believed that the claims and all dependent claims, taken in light of the remarks made herein, meet all criteria for patentability.

### **CLAIM REJECTIONS**

#### ***Rejection of claims under 35 U.S.C. §112, first paragraph***

The Examiner has rejected claims 28, 29, 32-37, 40-43, and 53 "because the specification, while being enabling for a galactanase, does not reasonably provide enablement for any and all enzymes which is capable of converting a compound into a substrate for the galactose oxidase" (page 2 of the Office Action). Applicants respectfully traverse this rejection.

While Applicants continue to believe the specification adequately enables the previously presented claims, the claims have been amended to expedite prosecution. In the interest of advancing the claims to allowance, claims 28, 29, 32, 35-37, 40, and 53 have been cancelled

without prejudice and claim 33 and its dependent claims have been amended to overcome this rejection.

Thus, Applicants respectfully request reconsideration and withdrawal of this rejection.

***Rejection of claims under 35 U.S.C. §112, second paragraph***

The Examiner has also rejected claims 28, 29, 32-37, 40-43 and 53 “as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regards as the invention” (page 4 of the Office Action). The Examiner has further suggested that “[i]t might be clearer if applicant defined the ‘compound’ as a galactan, galactose oligomer or a galactoase dimer” (page 5 of the Office Action). Applicants respectfully traverse this rejection.

In the interest of advancing the claims to allowance, claims 28, 29, 32, 35-37, 40, and 53 have been cancelled without prejudice and claim 33 and its dependent claims have been amended to overcome this rejection. Specifically, Applicants have amended claim 33 to recite “galactanase” instead of “an enzyme which is capable of converting a compound into a substrate for the galactose oxidase” and to recite the three compounds: galactan, galactose oligomer or a galactose dimer; as suggested by the Examiner. Applicants believe that amendments made herein fully overcome and obviate the stated grounds for rejection of said claims.

***Rejection of claims under 35 U.S.C. §103***

The Examiner has rejected claims 28, 29, 32-37, 40-43 and 53 “as being unpatentable over Beggs et al., Goers et al. ‘840, Goers et al. ‘973, in view of WO 93/25239, Jung et al. (abstract), Aoda et al., Wirth et al. (abstract), Morishita et al., or Baichwal et al. The Examiner states that “Beggs et al. (col. 5), Goers et al. ‘840 (col. 19), Goers et al. ‘973 (col. 21) each teach that galactose oxidase is known to be used in pharmaceutical compositions” (see page 5 of the Office Action). Additionally, “WO 93/25239 (page 6), Jung et al. (abstract), Aoda et al.(col. 3), Wirth et al. (abstract), Morishita et al. (col. 11), or Baichwal et al. (col. 1) teach that g[a]lactans are known in the art to be used in pharmaceutical compositions” (page 5 of the Office Action).

The Examiner alleges that “the invention is obvious since the two components are both known in the art to be used for the same purpose, namely pharmaceutical purposes.” The Examiner rejects Applicants’ argument that “the references do not teach a flour dough improving

composition" as "[t]he art does not have to teach the intended use of the claimed product." "Since the claims are drawn to the product and not the method of using the product, the claimed invention is properly rejected" (page 6 of the Office Action).

Applicants respectfully traverse this rejection.

Claims 28, 29, 32, 35-37, 40, and 53 have been cancelled without prejudice, rendering the instant rejection moot with respect to these claims. Claim 33, as amended, is the only remaining independent claim and claims 34, 41-43, and 54-58 are dependent therefrom.

Applicants have discovered a flour dough improving composition including, as a first component, **a galactose oxidase (EC 1.1.3.9), a second component, and flour**. See independent claim 33.

The Beggs et al. reference teaches therapeutic agents including a combination of a galactose oxidase and a peroxidase and in particular, teaches the use of such therapeutic agents in dental care. Goers et al. '840 and Goers et al. '973 references each teach antibody systems capable of delivering therapeutic agents to target site in vivo. Both references also teach that enzymes (e.g. galactose oxidase) that catalyze substrate modification with the production of cytotoxic by-products may be used as therapeutic agents. The Beggs et al., Goers et al. '840 and Goers et al. '973 references do not teach, suggest or motivate a person skilled in the art to make or use **a composition including galactose oxidase, a second component, and flour**.

The WO 93/25239 reference teaches the synthesis and methods of use of therapeutic agents targeted to cells. In particular, this reference teaches conjugates of arabinogalactans with therapeutic agents such as ARA-AMP or WR2721 as well as derivatives of arabinogalactans. Further, this reference teaches that galactose oxidase treatment of arabinogalactan can be used to create aldehyde groups. WO 93/25239 does not teach, suggest or motivate a person skilled in the art to make or use **a composition including galactose oxidase, a second component, and flour**.

Jung et al. (abstract) teaches the synthesis and use of therapeutic agents targeted to cells especially hepatocytes. The Aoda et al. reference teaches pharmaceutical vehicles including a water-soluble, polymeric substance such as galactan. The Wirth et al. reference teaches pharmaceutical salts such as galactan sulphate. The Morishita et al. reference teaches pharmaceuticals preparations which have excellent absorption properties for use in rectal or vaginal administration. The Morishita et al. reference further teaches therapeutic compositions

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which include chelating agents such as galactan. Lastly, the Baichwal et al. reference teaches controlled release pharmaceuticals. Accordingly, the WO 93/25239, Jung et al. (abstract), Wirth et al. (abstract), Morishita et al., and Baichwal et al. references do not provide any teaching, suggestion or motivation to a person skilled in the art, to make or use **a composition including galactose oxidase, a second component, and flour.**

Moreover, even if all the elements of a claim are taught by a combination of references, (which Applicants do not concede to be the case here), there is no *prima facie* case of obviousness in the absence of motivation to combine the references. MPEP 2143.01, citing *In re Rouffet*, 194 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998).

None of the above-cited 7 references, alone or in combination, teach or suggest a composition including galactose oxidase, a second component and flour. Accordingly, claim 33 and claims that depend therefrom are patentable over the above-cited 7 references. Applicants respectfully request the withdrawal of the rejection.

### CONCLUSION

Allowance of the claims is respectfully requested. Please apply any other charges or credits to Deposit Account **19-4293**.

If, for any reason, a telephonic conference with the Applicant would be helpful in expediting prosecution of the instant application, the Examiner is invited to call Applicants' Attorney at the telephone number provided below.

Respectfully submitted,

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